## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

# (19) World Intellectual Property Organization International Bureau



(43) International Publication Date 5 August 2004 (05.08.2004)

**PCT** 

(10) International Publication Number WO 2004/064764 A2

(51) International Patent Classification7:

A61K

(74) Agents: LUDWIG, S., Peter et al.; Darby & Darby P.C.,

(21) International Application Number:

PCT/US2004/000175

(22) International Filing Date: 6 January 2004 (06.01.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 10/345,063

14 January 2003 (14.01.2003) US

- (71) Applicant (for all designated States except US): SYNAP-TIC PHARMACEUTICAL CORPORATION [US/US]; 215 College Road, Paramus, NJ 07652 (US).
- (72) Inventors; and
- (75) Inventors/Applicants (for US only): MARZABADI, Mohammad, R. [US/US]; 153 Woodland Avenue, Ridgewood, NJ 07450 (US). WETZEL, John, M. [US/US]; 16-08 Well Drive, Fairlawn, NJ 07410 (US). CHEN, Chien-An [US/US]; 49-02 196th Place, Fresh Meadows, NY 11365 (US). JIANG, Yu [US/US]; 179 Manhattan Avenue, Apt. 7B, Jersey City, NJ 07370 (US). LU, Kai [US/US]; 67A Glenwood Avenue, Elmwood Park, NJ 07407 (US).

- 805 Third Avenue, New York, NY 10022 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

### Published:

 without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

₹ •

## (54) Title: SUBSTITUTED ALKYL AMIDO PIPERIDINES

(57) Abstract: This invention is directed to compounds which are selective antagonists for melanin concentrating hormone-1 (MCHT) receptors. The invention provides a pharmaceutical composition comprising a therapeutically effective amount of the compound of the invention and a pharmaceutically acceptable carrier. This invention provides a pharmaceutical composition made by combining a therapeutically effective amount of the compound of this invention and a pharmaceutically acceptable carrier. This invention further provides a process for making a pharmaceutical composition comprising combining a therapeutically effective amount of the compound of the invention and a pharmaceutically acceptable carrier. This invention also provides a method of reducing the body mass of a subject which comprises administering to the subject an amount of a compound of the invention effective to reduce the body mass of the subject. This invention further provides a method of treating a subject suffering from depression and/or anxiety which comprises administering to the subject an amount of a compound of the invention effective to treat the subject's depression and/or anxiety.